

scope, the beak of which lies in the prostatic urethra, is gently moved about. The introduction of a steel instrument should, for obvious reasons, be omitted as long as possible and anxious as the modern urologist may be in almost all cases of urinary disturbances to establish a correct diagnosis through the evidence furnished by the cystoscope, he ought to refrain from the use of this diagnostic means in old prostatics of the first stages, whenever there exists a reasonable hope for the betterment of their condition by an expectant and conservative regime.

Whenever though the malady has entered into the latter stages the introduction of a steel instrument and particularly that of the cystoscope is strictly indicated for diagnostic purposes. I consider cystoscopy in old prostatics when performed *lege artis* and on the basis of strict indications to be the most important aid towards a correct interpretation of the subjective and objective symptoms. This method of examination though should always remain in the hands of the well trained and experienced urologist, otherwise more harm than good will result from it. Very often a poorly executed cystoscopy on an old prostatic with insufficient power for bladder-expulsion will be followed by a hemorrhage from the vulnerated prostate, or a cystitis or even an ascending renal infection. It is therefore not advisable to cystoscopize these patients at the office and I insist upon the procedure being carried out, if possible, at the hospital after a careful preparation. It is not in the scope of this paper to dilate upon the cystoscopically characteristic and important findings. In many cases I have found the graphic determination of the different parts of the vesical outlet as indicated by Young of great aid in order to ascertain the exact points at which the impediment to urination was located. The differential diagnosis between arteriosclerosis of the bladder vessels and true prostatic hypertrophy was only possible by cystoscopy in two of my cases. Complications of hypertrophy with vesical stone, tumor, pyelitis and pyonephrosis can, in most instances, only be diagnosed through the aid of the cystoscope. From the intensity of the trabeculosis and the size and number of diverticula as seen cystoscopically, one is enabled before operating to arrive at a fair conclusion upon the post-operative bladder-function.

Schlaginweit's retrograde cystoscope has not proved in my hands as useful from a diagnostic standpoint as it promised at first. I could always ascertain a thoroughly satisfactory view of all parts of the vesical sphincter with the ordinary Nitze instrument. I would advise though on account of the frequent smaller or larger hemorrhage incidental with the introduction of a steel instrument in these cases, to always use the irrigating cystoscope; by these means the sanguinolent bladder fluid can quickly be changed to a clear one and by having the bladder filled gradually while looking through the cystoscope one can obtain a perfect view of the trigone with its ureteral orifices and look into an existing recessus.

Hemorrhage from some point of the urinary tract is a very frequent complication of prostatic hypertrophy. This fact needs to be accentuated because

in the minds of many physicians an hematuria which occurs in a prostatic at once sets up the suspicion of cancer. It is well therefore to recall the statement of such an experienced authority as Guyon (13) that the prostate is the most frequent source of bleeding from genito-urinary tract. Abnormal vascularization or arteriosclerosis are the main causes for this phenomenon. I have observed hematuria in all the three stages of prostatism and in not a few cases my tentative diagnosis of malignancy was fortunately not borne out by the future course of the disease or by its postoperative findings.

This leads to the consideration of the differential diagnosis between simple hypertrophy and malignancy. Everything of recent note on this subject can be found in the various exhaustive publications of Young (14) who lays particular stress upon the palpatory findings characteristic of prostatic cancer, which he has found to be in evidence in 78 of his 111 cases of prostatic carcinoma. Since, according to this author, in one of four cases of prostatic hypertrophy exists malignancy, the necessity of an early diagnosis cannot be over-estimated.

I am fully aware of the fact that I have only superficially touched upon a few and entirely omitted to mention many other important diagnostic points of prostatic hypertrophy. An attempt to cover this large and exhaustive subject in the short space of time at my command appears obvious. If though I have succeeded to give the impetus to an active discussion, I shall feel amply rewarded for my modest efforts.

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PALLIATIVE TREATMENT OF PROSTATIC HYPERTROPHY.

By E. G. M'CONNELL, M. D., San Francisco.

In taking up the subject assigned to me I do not deem it advisable to enter into the pathology and etiology of enlargement of the prostate. To hold to the theory of Guyon that it is due to a general arteriosclerosis, or advance the statement of Harrison regarding compensating hypertrophy, or argue the conditions are due to adenomatous or fibroid changes, as all these will no doubt be included in the other papers.

As the catheter enters largely into the handling of all cases of prostatic hypertrophy, I consider it important to call attention to the character of the urethra and the changes that take place in prostatic hypertrophy. Enlargement of the gland takes place in an antero-posterior direction, or more strictly speaking, in a posterior one. On account of the prostate being more or less firmly fixed at the apex the growth is toward the bladder. As a result of the growth upward and inward the vesicle orifice of the urethra is raised so that the prostatic urethra is more or less bent upon itself, the posterior portion forming something of an angle with the anterior one and interfering with the passage of certain catheters. The unequal growth of the lateral lobes at times will deviate the urethra from side to side, or where the growths are comparatively equal you have formed at times the so-called bladder bar.

The patient presents himself usually with a history of sudden retention following some excess or exposure. The retention being relieved, he has probably remained comfortable for many months when another attack has left him with more or less frequent micturition and some pain. Or your case may complain of frequent urination, and especially of the fact that he is disturbed at nights several times on account of having to urinate; or again the patient presents himself with the statement that he has to pass urine every few minutes. Ask him if he empties the bladder and he will assure you that he does, that he is urinating all the time. It is in this class of cases where the distension has been gradual and no infection has taken place from without, that you will find the large amount of residual urine, one case I remember having sixty-four (64) ounces. No matter what the history of the case, I first determine the extent of enlargement of the prostate and the amount of residual urine. After the patient has passed all the urine he can naturally, I place him horizontally upon the table and after carefully cleansing the parts, introduce a sterile silver catheter. With this I am able to determine if there is a stricture of small caliber; the changes in the urethra due to growth of the prostate; the position of the shaft of the instrument relative to the axis of the body, and the distance traversed before the urine flows. After entering the bladder you are able to determine the character of the bladder wall and the presence or absence of stone. With the catheter still in place and the finger in the rectum you are able to map out more carefully the extent and character of the prostatic enlargement. The fluid removed will give you the exact amount of residual urine. With the patient in the horizontal position at no time have I ever experienced any trouble from removing all the urine in the bladder.

This, in an offhand way, seems easy, but at times you may experience considerable difficulty in introducing your catheter. Remember, *above all things* that *no force* should be applied to a catheter; be gentle, be patient; time should ever enter into an examination of this kind. If you

are in a hurry; if you have an appointment; by all means defer the examination until another time. As gentleness is of paramount importance in examining the urethra, so it is in examining the rectum. Insert the finger slowly and gently, for remember you probably have more or less of an inflamed condition, and undue force will cause your patient considerable pain, and he at once brands you a brute.

If your examination cannot be finished to your satisfaction in one sitting, either on account of obstructions or fear on the part of the patient, be not discouraged, you are dealing with no trivial condition and if necessary make repeated examinations.

You will at times encounter certain cases of so-called hypertrophy with or without residual urine. They are not cases of true hypertrophy, but are due to a chronic prostatitis. They present a large, smooth, spongy mass and as a rule offer no obstruction to the passage of a catheter. Under massage they rapidly diminish in size and all residual urine disappears. It is this class of cases that often starts a man on the road either to success or failure.

All cases of prostatic hypertrophy should be given a trial with the catheter. If they can be taught cleanliness, have a tolerant bladder, can be comfortable and happy and not have to pass a catheter to exceed four times in twenty-four (24) hours, then life for them is well worth living.

The beginning of catheter life is a grave period, and too much time and patience cannot be spent in properly instructing the patient and fitting him with the proper instruments. Do not give him a catheter and turn him loose, for you will do more harm than good. Teach him to be clean; drum it into him, first, last and all the time. Then select his catheter; if a soft rubber one will answer, well and good; but get the right kind: one with a solid end, and smooth eye; show him how to wash it with soap and water after use and how to boil, not cook it. If your soft catheter will not go on account of the bend in your prostatic urethra, use a coudé or bi-coudé, but don't select a cheap one that will break about the third time it is used. Get the best; something like a Mau, Weis or Porges; instructing the patient that the point must be up, and mark the instrument so he can tell where the point is traveling. Rarely you will find cases where the silver catheter must be resorted to, but when you do, you must watch your patient most carefully until he becomes proficient in its use to prevent his wounding the deep urethra, producing false passages, etc.

The complications that arise as a result of prostatic hypertrophy I will not touch upon except in the briefest way. Cystitis, hematuria, stone, etc., you are all familiar with, but the effect on the ureters and kidney I think should be dwelt upon. Owing to the way the ureters enter the bladder, the urine flows from the kidneys more or less unobstructed, but when the bladder becomes dilated, the ureteral openings are compressed resulting in back pressure upon the kidney. When a man enters upon a catheter life, he is indeed fortunate if he cannot pass part of the urine naturally, for then he

is dependent upon the catheter and the bladder is emptied at regular intervals and there is not that overdistension at times, which produces the back pressure in the kidney and the resulting disturbance in blood pressure.

The regular life in this class of cases must be insisted upon regarding exercise, sleep, diet, drink, etc. However, I do not believe where a patient has been more or less accustomed to alcohol all his life that he should be absolutely denied an occasional whisky and water, for the entire withdrawal of stimulants does more harm to his general condition than an occasional drink will do the bladder.

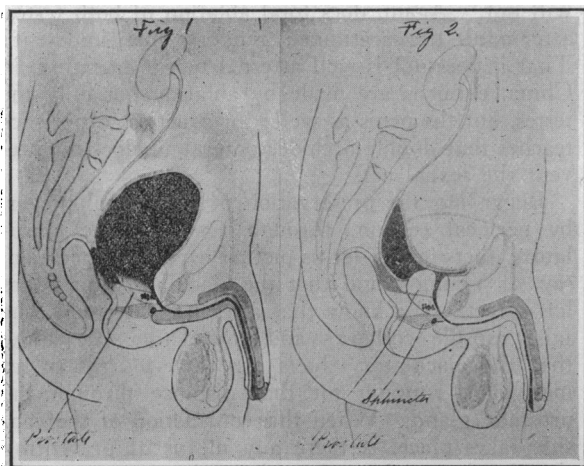
In conclusion I would repeat, give all your prostatic cases a chance with the palliative treatment; if the result is not what you hope, then you can resort to radical procedure, but don't wait too long.

OPERATIVE TREATMENT OF PROSTATIC HYPERTROPHY.

By G. S. PETERKIN, M. D., Seattle, Wash.

I have been asked to present, on Operative Treatment of Prostatic Hypertrophy, an interesting, instructive ten minutes' paper—asked to present such a paper before co-workers, specialists in urologic work. It is indeed a great honor, but it is not with pleasure, but timidity that I accept the task—knowing my inability. Your program committee has, however, made the paper interesting, by setting the time limit.

Enlargement of the prostatic gland, per se, is not the cause of the symptoms of prostatism; it is the extent of obstruction produced to the outlet of the bladder, plus or minus microbic infection. The obstruction is mechanical, so it requires mechanical means to remove it—operation; therefore, operative treatment for prostatic hypertrophy is *not* the *radical* treatment of this pathologic condition, but the *rational*. That the obstruction is mechanical, you can see, by comparing these two diagrammatic drawings: Fig. 1, shows the position of the bladder



outlet—prostate normal; Fig. 2, prostate enlarged; urethra elongated; outlet, elevated. The bladder contracting, outlet is closed mechanically, by bladder wall; a pool of urine remains the focus for

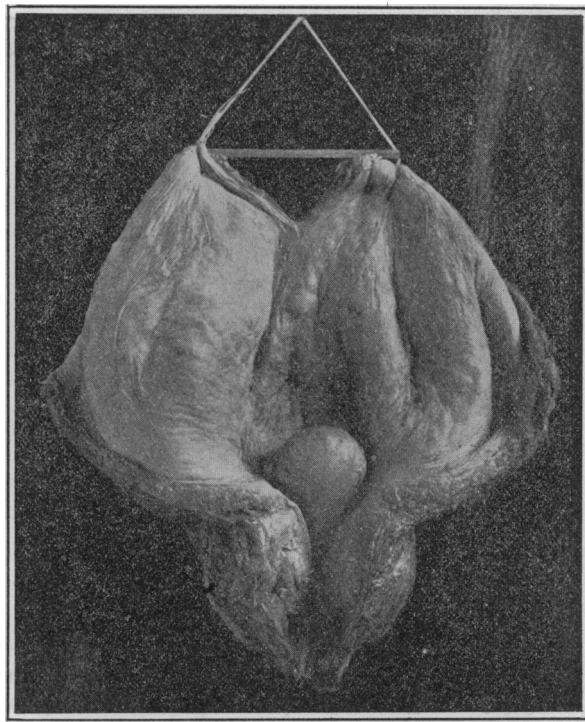


Figure 3.
A middle lobe enlargement of prostate.

microbic infection—size of pool (amount of retention) depending upon the size and character of the prostatic enlargement.

In the early history of Oophorectomy—ovaries diseased—total enucleation; to-day, we have conservation of ovarian tissue.

All forms of prostatic enlargement are not the same. You have all seen this form of enlargement (Fig. 3). Why not remove this lobe, as you would a bladder tumor; excise the pedicle; close the suprapubic wound; have complete recovery from operation—that is, a well patient, in practically six days; do rational, conservative, prostatic surgery?

In prostatic hypertrophy, as previously stated, we have various forms of enlargement. We have complications—for instance, calculi, sacculations, as diagrammatically illustrated in Fig. 4, drawn from a pathologic specimen, etc. We have conditions simulating prostatism. Four months ago, I was asked to operate for prostatic hypertrophy, a similar diagnosis having been made by five physicians—accepted the diagnosis; saw the patient on the operating table; opened the bladder, suprapubically. My findings, a papilloma the size of a small pigeon's egg, attached by a pedicle, one-half inch long, to the left side of mouth of bladder, anterior to left ureteric opening, acting as a ball valve; prostate, normal. Conditions like this may simulate prostatic hypertrophy, as well as contracture du col, etc., so the surgeon who is going to give not only a correct prognosis and advocate logical after treatment, but also do accurate as well as conservative surgery, on the prostate, must know the exact existing conditions previous to operation. In other words,